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SOUTHERN FOREST PEST REPORTER

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CONDITIONS IN BRIEF



Losses caused by forest insects and diseases have approached an all-time high in the southern states. Outbreaks of bark beetles and defoliators continue to plague landowners of forest stands. The primary problem during the current reporting period has been with the southern pine beetle. This insect has literally exploded in southeast Texas and has recently become a serious problem in portions of South Carolina and northeastern Georgia. In Texas an estimated 2 million acres were affected and the infestation was rapidly expanding in early June. If new outbreaks continue to develop in the Region during the summer, losses may exceed a billion board feet. Southern pine beetle in southeastern Mississippi and northern Alabama has remained at a low epidemic level.

Control efforts are now being applied to most of the southern pine beetle outbreaks by a coordinated effort of the states, forest industries, private landowners and the U. S. Forest Service. Both salvage and chemical measures are being used.

Black turpentine beetle activity has been relatively low this year. However, increased beetle activity was reported in connection with naval stores operations. Ips sp. beetles have become more serious during recent months in central Georgia and on the Sam Houston National Forest in Texas. There is also some indication of increased Ips sp. activity in Florida areas hit by 1959-61 hurricanes.

The elm spanworm appeared on hardwood in May for the 9th consecutive year, affecting portions of north Georgia, southwestern North Carolina, southeastern Tennessee and, for the first time, western South Carolina. Defoliation

Conditions in Brief (Cont'd)

in general was less severe in 1962 than last year. Parasites and predators were found in greater numbers this year but the total effect on the spanworm population is yet to be determined.

Forest tent caterpillar again defoliated large areas in Louisiana and Alabama. Balsam woolly aphid continued to expand the area of infestation in North Carolina and kill a large number of trees. A pecan worm was reported to have defoliated extensive areas of bitter pecan east of Alexandria, Louisiana.

Neodiprion pratti pratti was reported light this spring in 8 counties of North Carolina. The red-headed pine sawfly is causing heavy mortality of young loblolly pine in Lawrence County, Tennessee, and has recently been reported on the increase in the Gulf States and Arkansas.

Infection of comandra blister rust was reported on a shortleaf pine plantation in Arkansas. This rust is not common in Region 8 but was previously observed in Tennessee and Mississippi. Needle cast was common and caused concern in the southeastern and Gulf States. New areas of Fomes annosus infection have been located in Arkansas, Louisiana, and Alabama. Oak Wilt surveys are being conducted in Arkansas, North Carolina and Tennessee.

STATUS OF FOREST INSECTS

SOUTHERN PINE BEETLE, Dendroctonus frontalis Zimm.

ALABAMA

The current southern pine beetle epidemic in Alabama seems to have been centered on the Talladega Division, Talladega National Forest. In most cases, the broods are moderate in size. Aerial surveys of the Oakmulgee Division, Talladega National Forest, the Tuskegee National Forest, and the William B. Bankhead National Forest showed very little activity. However, increased activity can be expected in all areas from June through September.

GEORGIA

The southern pine beetle continues at epidemic levels on National Forest and private lands in north Georgia. An increase in green infested trees was found on the Tallulah Ranger District during a recent control project inspection. Some spots indicate a 10:1 ratio of green infested trees to each fader.

Surveys made in Georgia by the Georgia Forestry Commission in cooperation with the U. S. Forest Service showed the southern pine beetle occurring in epidemic numbers in varying intensity in the northeast one-third of Georgia. Aggressive centers of infestation existed in Hall, Elbert and adjacent counties. Recent infestations have been reported as far south as Wilcox County. It is estimated that some 40 million board feet of timber has been lost since the

infestation made its first appearance in March. Control measures were initiated by the Georgia Forestry Commission promptly after discovery of the outbreak.

MISSISSIPPI

Southern pine beetle activity in southwestern Mississippi has been relatively low during the first half of 1962. In an aerial survey made of the Homochitto National Forest in late April 1962, 14 multiple-tree spot infestations and 80 single trees were mapped. From this data and subsequent ground examinations, it was estimated that 476 infested trees were present in this area.

SOUTH CAROLINA

One of the more serious infestations of southern pine beetle in the Region has recently been found in western South Carolina. The new area is located east of the older infestation in the General Pickens Ranger District. Fourteen counties are involved in the recent find with the heaviest tree mortality occurring in Union, York, Spartanburg and Laurens Counties. In Union County an estimated 13,818 pines were reported infested.

Control of the southern pine beetle has continued on the General Pickens Ranger District, South Carolina National Forest, with some interruptions during the past three years. Since July 1, 1961, some 22,000 trees have been cut and treated. Operational surveys conducted in June revealed an additional 137 spots of infestation containing an estimated 1500 trees. The size of the spots ranged from single trees up to 160 trees, about the same as the May survey. The forest plans to continue mop-up work until the infestation reaches a low endemic level or the timber is harvested.

TEXAS

The southern pine beetle infestation in southeastern Texas covers approximately two million acres mainly in the Big Thicket area. Outbreaks have recently been observed as far north as Corrigan, Texas, in Polk County and northwest of Onalaska in Trinity County. In late June, five of seven control project zones in the Big Thicket area contained an estimated 1,500 uncontrolled multiple-tree spot infestations. Some of the groups were several hundred acres in size and contained an average of 1,000 infested trees.

Beetle populations in Texas are reported in June to be on a sharp uptrend with broods from a single tree reinfesting as many as 8 - 12 new green trees within a 30 day period.

Southern pine beetles are active on three of the Texas National Forests; the Davey Crockett, Sam Houston and Angelina.

PINE ENGRAVERS, Ips sp.

GEORGIA

Heavy concentrations of Ips sp. have been found scattered throughout north Georgia, especially in the area of southern pine beetle infestations. Baldwin County in central Georgia has about the heaviest infestations. This county is near the southern margin

of the heavy southern pine beetle infestation. Hancock, Jasper, Jones, Putnam, Taliaferro and other surrounding counties have concentrations of Ips sp. and southern pine beetles and it is sometimes difficult to determine which insect is the primary invader. Ips sp. infestations have been found in nine Georgia counties but the present indication is that the outbreak is not increasing.

FLORIDA There has been an indication of increased Ips sp. activity in Florida areas hit by hurricanes during 1959-1961. The drought last year and early this summer brought increases in beetle populations throughout the State. Trees damaged by forest fires resulted in new infestations.

TEXAS Ips sp. activity has been especially high on the Big Thicket and Raven Districts, Sam Houston National Forest. Losses are occurring in areas where trees growing in heavy clay soils have been weakened by the recent drought. In some instances the Ips sp. are associated with the southern pine beetle. In many cases Ips sp. were the primary invaders.

BLACK TURPENTINE BEETLE, Dendroctonus terebrans (Oliver)

MISSISSIPPI Black turpentine beetle activity has been relatively low during this period. However, increased activity in connection with naval stores operations has been reported. Damage has been especially heavy in areas where logging operations have been in progress on adjacent lands. Losses due to black turpentine beetle will undoubtedly increase as the season progresses, especially in low areas following logging.

LOUISIANA

GEORGIA Black turpentine beetle infestations are on an increase in north Georgia as well as Ips sp. and southern pine beetle. In the areas of lighter southern pine beetle and Ips sp. attack, such as Green, Jasper and Jones Counties, the black turpentine beetle is the main cause of tree mortality.

FLORIDA A general increase in black turpentine beetles is reported in the
GEORGIA naval stores belt of southern Georgia and northern Florida. This results from trees being weakened by drought conditions last fall and early this summer.

WEEVILS, Pissodes sp.

LOUISIANA A weevil which has been tentatively identified as Pissodes nemorensis was found infesting a young loblolly pine plantation near Aimwell, Louisiana. The trees were planted on a heavy, poorly drained soil; and many trees had deformed root systems resulting from poor planting. Large patches of trees had been girdled by larval feeding in the inner bark near the ground line. Similar damage has been reported in several areas in northern Louisiana.

GEORGIA

A weevil tentatively identified as Pissodes nemorensis Germ. has been reported by the Georgia Cooperative Extension Service to be damaging slash and longleaf stands in Tift, Crisp, Wilcox and Coffee Counties. A tremendous increase in activity was noted this year and many plantations have been attacked. Most concern has come from home owners who have reported infestations in yard trees. Young trees are most commonly attacked, but infestations in mature stands are not uncommon. This insect was first reported in Georgia last year.

PINE COLASPIS, Maecolaspis pini (Barber)

FLORIDA

Reports were made by Merkel (Southeastern Forest Experiment Station) in late June that pine colaspis (Maecolaspis pini) was quite active in northeast Florida for the second consecutive year. One large area (50-75 acres) was reported on a five-year-old slash pine plantation near Yulee, Florida. Several others were reported in Alachua, Baker, Lake and Columbia Counties. Merkel reported collecting as many as 50 adults in May from 3 slash pine seedlings in the Olustee Experimental Forest. No tree mortality was expected from pine colaspis but shoot elongation may be significantly reduced.

ELM SPANWORM, Ennomos subsignarius (Hbn.)

NORTH CAROLINA GEORGIA TENNESSEE

Elm spanworm was again reported defoliating hardwoods in May and June on one and one-half million acres in North Carolina, Tennessee and Georgia in the same general areas as in 1961. However, mass defoliation of hardwood stands did not occur as has been the case for the past several years. In most instances complete defoliation during the current year was limited to black walnut, hickory, and northern red oak. Natural control factors have apparently had some effect on reducing the over-all spanworm population, but the caterpillars are still a nuisance around homes and recreational areas. The spanworm infestation continued to move northeastward and extended into South Carolina for the first time. Aerial surveys are now in progress to delineate the 1962 area of infestation.

Spanworm control operations have been completed on a total of 8,710 acres of high value recreational areas on the Joyce Kilmer Memorial Forest and the Coweeta Hydrological Lab, North Carolina; 2,220 acres on the Chattahoochee National Forest; and 1,500 acres of north Georgia State parks. The above control areas were sprayed with 1/2 lb DDT in oil per acre via helicopter to control the insect.

FOREST TENT CATERPILLAR, Malacosoma disstria (Hbn.)

ALABAMA

In late May 235 thousand acres of bottomland and hardwoods were surveyed along the Alabama, Tombigbee and Mobile Rivers in southern Alabama. This same area was infested by forest tent caterpillar during the past several years. Of this area, over 12 thousand acres were heavily defoliated and an additional 48 thousand acres lightly defoliated.

The heaviest defoliation occurred in the bottomlands just west of Stockton, Alabama. The primary species defoliated were water tupelo and sweetgum. Scattered defoliation of gums was also noted along minor drainages outside the surveyed area. Over 200 thousand acres had been heavily defoliated last year.

LOUISIANA

The forest tent caterpillar defoliated large areas of water tupelo, sweetgum and other bottomland hardwoods in Louisiana for the fifth consecutive year. However, damage was much less extensive than it was last year. A cooperative aerial survey with the Louisiana Forestry Commission of over 1.5 million acres of susceptible forest type in late April showed that 169 thousand acres had been lightly defoliated. Heavy defoliation was concentrated in the areas just west of Lake Maurepas and Lake Ponchartrain, in the Atchafalaya Basin near Lake Veret and Grand Lake, north of Thibodaux, and surrounding Lac Des Allemands. Last year, about 1.5 million acres had been defoliated. No defoliation by the forest tent caterpillar was found this year in the area east of Alexandria, Louisiana.

PECAN WORM, Unidentified

LOUISIANA

Unidentified lepidopterous larvae were discovered defoliating large areas of bitter pecan, Carya aquatica (Michx. f) Nutt. in bottomlands east of Alexandria, Louisiana. Residents of the area report that the defoliation is an annual occurrence and that the larvae are excellent fish bait. Larvae are currently being reared to obtain adults for identification.

MISCELLANEOUS INSECTS

GULF STATES TENNESSEE NORTH CAROLINA

Early defoliation by the fall webworm, Hyphantria cunea (Drury), and by the red-headed pine sawfly, Neodeprion lecontei (Fitch), has been observed in Louisiana during this period. In the area west of Lake Maurepas, the fall webworm is in its second generation. Sphinx moth (unidentified species) larvae defoliated sourwood in most of the Tennessee - North Carolina section of the Great Smoky Mountain National Park.

STATUS OF FOREST DISEASES

FOMES ANNOSUS ROOT ROT, Fomes annosus (Fr.) Cke.

ALABAMA ARKANSAS LOUISIANA

Fomes annosus root rot has probably caused more concern than any other particular forest tree disease in recent years. One reason, perhaps, is its widespread occurrence. Fomes annosus has been encountered on seed production areas on the Bayou, Piney, Sylamore, Magazine and Pleasant Hill Ranger Districts of the Ozark National Forest, Arkansas. It has also occurred on the Fourche, Poteau, and

Caddo Ranger Districts of the Ouachita National Forest, Arkansas. It has been found on the Vernon, Caney and Catahoula Ranger Districts, Kisatchie National Forest, Louisiana. This disease has been observed on a longleaf pine seed production area on the Talladega Ranger District, Talladega National Forest, Alabama.

FLORIDA
N. CAROLINA
S. CAROLINA
TENNESSEE
GEORGIA

Fomes is common in North Carolina and Tennessee on white pine and in South Carolina, Georgia, and Florida in thinned loblolly and slash plantations. Freshly cut stumps in newly established seed production areas throughout the Region are being treated with coal-tar-creosote to reduce infection.

NEEDLE CAST, Hypoderma lethale Dern

GULF STATES

Needle cast, caused by Hypoderma lethale, has been quite heavy on loblolly and longleaf pine throughout the gulf states area. However, little damage is expected to be caused by this disease. Control measures are not recommended under forest conditions because outbreaks usually clear up spontaneously.

GEORGIA
FLORIDA

Widespread occurrence of needle cast in Georgia and northern Florida this spring has brought about much public concern and inquiry this year.

COMANDRA BLISTER RUST, Cronartium comandrae, Pk.

ARKANSAS

Comandra blister rust, Cronartium comandrae, has been found infecting several acres of shortleaf pine seedlings on the Buffalo Ranger District, Ozark National Forest, Arkansas. An evaluation of this area was made during the early part of June by Zone 4 Pathologists. Due to the short period comandra blister rust has been known to occur on shortleaf pine, the seriousness of the disease cannot be determined at the present time.

LITTLELEAF

PIEDMONT
AREA

Littleleaf disease continues a heavy toll of shortleaf pine from stands developed on piedmont soils in the Region. Salvage of timber in the later stages of decline remains the only feasible method of reducing losses from this disease.

OAK WILT

ARKANSAS
N. CAROLINA
TENNESSEE
OKLAHOMA

Oak wilt caused by Ceratocystis fagacearum occurs in Arkansas and Oklahoma. Arkansas is continuing its detection and control project this year. The cooperative oak wilt control program in North Carolina started June 15. Regional personnel are continuing the oak wilt survey in Greene and Washington Counties, Tennessee. This survey is a continuation of a survey started in 1958 by the Southeastern Station to compare the incidence of oak wilt in a county (Greene) where control is conducted with a county (Washington) where control is not undertaken. As in previous years, control in Greene County will be done by the Tennessee Commission of Forestry.

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